

## United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.usplo.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/517,868	12/16/2004	Daniel Decroupet	4004-065-30 NATL	2902	
	30448 7590 10/17/2007 AKERMAN SENTERFITT			EXAMINER	
P.O. BOX 3188			HIGGINS, GERARD T		
WEST PALM BEACH, FL 33402-3188			ART UNIT	PAPER NUMBER	
			4174		
	•		MAIL DATE	DELIVERY MODE	
			10/17/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)					
	10/517,868	DECROUPET ET AL.					
Office Action Summary	Examiner	Art Unit					
	Gerard T. Higgins	4174					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).							
Status							
1)⊠ Responsive to communication(s) filed on 16 De	ecember 2004.						
	action is non-final.						
,—							
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims							
4)⊠ Claim(s) <u>1-6,9-12,19-22,24-29,33 and 35-40</u> is/are pending in the application.							
4a) Of the above claim(s) is/are withdrawn from consideration.							
5) Claim(s) is/are allowed.							
6)☐ Claim(s) is/are rejected.							
7) Claim(s) is/are objected to.	7) Claim(s) is/are objected to.						
8) Claim(s) 1-6,9-12,19-22,24-29,33 and 35-40 are subject to restriction and/or election requirement.							
Application Papers							
9) The specification is objected to by the Examiner.							
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority under 35 U.S.C. § 119							
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>							
-							
Attachment(s)							
1) Notice of References Cited (PTO-892)	4) Interview Summary						
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date. 20071002  Notice of Informal Patent Application							
Paper No(s)/Mail Date 6) Other:							

Application/Control Number: 10/517,868

Art Unit: 4174

## **DETAILED ACTION**

## Election/Restrictions

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-6, 9-12, and 19-21, drawn to a method for the production of a glazing.

Group II, claim(s) 22, 24-29, 33, and 35-40, drawn to a glazing.

- 2. The inventions listed as Groups I and II do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features because the layered glazing structure of applicants' invention is rendered obvious due to the structure described in Table 1, specimen B of EP 0304234 in view of EP 0233003. The structure in EP 0304234 comprises almost all of the limitations and relative dimensions of applicants' claimed layered glazing. Some of the specific limitations included in applicants' claim 22 are as follows:
  - > The electronegativity of the 1<sup>st</sup> protective layer is less than the electronegativity of the functional layer,
  - > The electronegativity of the 1<sup>st</sup> protective layer is greater than 1.54, and
  - ➤ The electronegativity of the 2<sup>nd</sup> protective layer is less than 2.04.

EP 0304234 teaches the third abovementioned electronegativity limitation in that the second protective layer (5) is comprised of fully oxidized TiO<sub>2</sub>, which is the same material used by applicants.

EP 0304234 fails to disclose a sacrificial layer with the abovementioned electronegativity requirements. EP 0233003 teaches an "additional metal layer," equivalent to the sacrificial layer of EP 0304234, comprised of a metal selected from the group consisting of "aluminum, titanium, zinc, and tantalum" (pg. 2, line 50).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to replace the sacrificial metal layer (3) of EP 0304234 with Zn metal as described in EP 0233003. These materials provide the same purpose in that

Application/Control Number: 10/517,868

Art Unit: 4174

the layer is a sacrificial layer for the oxygen that is added during further lamination steps.

Zinc and silver metals have electronegativities of 1.81 and 1.93, respectively. The 1<sup>st</sup> protective layer comprised of zinc would have an electronegativity less than the functional layer comprised of silver. Additionally, the electronegativity of zinc is clearly greater than 1.54.

3. A telephone call was made to Jerald I. Schneider on October 2<sup>nd</sup>, 2007 to request an oral election to the above restriction requirement, but did not result in an election being made.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.

Application/Control Number: 10/517,868

Art Unit: 4174

- 4. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).
- 5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gerard T. Higgins whose telephone number is 571-270-3467. The examiner can normally be reached on M-F 7:30am-5pm est. (1st Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, D. Lawrence Tarazano can be reached on 571-272-1515. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Gerard T Higgins Examiner Art Unit 1709

D. LAWRENCE TARAZANO PRIMARY EXAMINER